K. Water Levels



WL-1

Warning Hazardous Area Water Level May Change Rapidly Siren Indicates Increased Spillway Flow

COMMENT:

Identifies danger, source of danger, and trigger (siren) for increased awareness of changing conditions. Gated ramp also allows exclusion increasing overall effectiveness.

RECOMMENDATION:

None.



WL-2

SIGN:

Danger Water Levels Change Rapidly Stay out Stay Alive

COMMENT:

Good placement, materials and readability, color scheme and use of symbols.

RECOMMENDATION:

None.



Danger Turbulent Water Boats Keep Out

COMMENT:

Uses orange symbol and border of the USWMS. Identifies danger to appropriate audience. Lighting increases effectiveness.

RECOMMENDATION:

None.

WL-3



WL-4

SIGN:

Danger Rapidly Rising Water Siren Warning Gates Raise Immediately Seek High Ground No Swimming or Wading

COMMENT:

Sign uses trigger word, identifies source of danger and action required to avoid.

RECOMMENDATION:

Remove empty frame or replace sign on left side.



WL-5

Restricted Area Warning Beware of Hazards Such as Submerged and Floating Debris and Stumps and Rocks which have been Left in the Lake to Improve Fish Habitat For Rec. Use Only Users Proceed at Own Risk Use Extreme Caution Activates such as Jet Skiing Prohibited.

COMMENT:

Uses trigger words to convey level of danger, conveys reason and form danger takes, and gives specific activities to avoid.

RECOMMENDATION:

None.



WL-6

SIGN:

Warning Sudden changes in velocity and water level

COMMENT:

Good sign to use down stream of facility. However, public may perceive less potential danger with smaller signs.

RECOMMENDATION:

Assess level of risk for this location, and resize sign if necessary.



WL-7

Danger Do Not Enter This Waterway..., Danger Water May Be Discharged In This Area at Any Instant. It Is Extremely Dangerous Keep Away

COMMENT:

Use of standardized danger trigger and color setup increases effectiveness. Signs identify level of risk, nature of the danger, and advise on how to avoid the danger.

RECOMMENDATION:

None.



WL-8

SIGN:

Warning The River
Beyond This Sign is
Subject to Rapidly
Rising or Turbulent
Water Enter at your
Own Risk City of ... Falls

COMMENT:

Good placement at parking area within sight of hazard. Identifies specific danger and area of effect. Includes responsible organization.

RECOMMENDATION:

Inclusion of contact information may increase public perception of the level of enforcement/risk.



WL-9

Warning Water Level Increases Rapidly Without Warning and Becomes Very Turbulent and Extremely Dangerous Fishing Swimming Boating Prohibited

COMMENT:

Good placement at access point to reservoir. Good use of color combinations to add to effectiveness.

RECOMMENDATION:

None.



WL-10

SIGN:

Warning Water Level Subject to Rapid Change

COMMENT:

Good use of position, border, and contrasting color. Note second sign closer to tailrace.

RECOMMENDATION:

None.



WL-11

Danger Due To Sudden Water Fluctuation Do Not Enter This Area

COMMENT:

Good use of signage placement to guide public behavior at a recreation site. Keeps site looking natural.

RECOMMENDATION:

Coloration does not indicate level of possible risk, though it does blend in with surroundings. Assess risk and need for alternate color scheme.



WL-12

SIGN:

Warning Hazardous
Area Water Level Flow
May Change Rapidly
Siren Strobe Indicates
Increased River Flow

COMMENT:

Very clear sign.
Reverse font colors in trigger word, additional safety measures in place and placement of sign increase effectiveness.

RECOMMENDATION:

None.



WL-13

Beware Water Rises Without Warning, Danger Dam Ahead

COMMENT:

Good font size, border and color combination for boaters and shore users.

RECOMMENDATION:

Sign should be mounted properly.



WL-14

SIGN:

Warning Water Rises Rapidly When Horn Sounds and or Light Flashes

COMMENT:

Contrasting colors, border and identification of further safety measures increases effectiveness.

RECOMMENDATION:

None.



Danger Sudden Release of Water When Horn Sounds Leave the Area at Once

COMMENT:

Use of standard danger trigger increases effectiveness of subtext warning.

RECOMMENDATION:

None.

WL-15



SIGN:

Peligro Cuando Suene La Alarma Y La Luz Prenda Y Apague Abandone El Area Inmediatamente

COMMENT:

Example of foreign language signage warning of danger and identifying the meaning of Danger signals. (See above for English version).

RECOMMENDATION:

Foreign language signs should be mounted immediately next to the same warning in English using the same style and format to increase recognizability and increase effectiveness.

WL-16



Warning Changing Water Levels Be Constantly Alert for Water Level Increases Water Upstream May Be Released at Any Time

COMMENT:

Good combination of warning, identification of hazard and level of immediacy; "constantly alert."

RECOMMENDATION:

None.

WL-17



SIGN:

Aviso Cambios De Nivel De Agua Este Siempre Alerta Para Crecida Del Nivel El Agua Arriba Se Descarga Sin Aviso

COMMENT:

"Warning Changing Water Levels Be Constantly Alert for Water Level Increases Water Upstream May Be Released at Any Time" Good combination of warning, identification of hazard and level of immediacy "constantly alert."

RECOMMENDATION:

Foreign language signs should be mounted immediately next to the same warning in English using the same style and format to increase recognizability and increase effectiveness.

WL-18

Location:

Feature No. is located on outside of the chain link fence on the left abutment approximately 300 feet downstream from the tailrace.

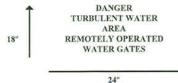
Feature

Description:

Feature No. is a warning sign, twenty-four (24) inches wide by eighteen (18) inches high and made of aluminum. The sign is mounted approximately five (5) feet off the ground on the outside of the chain link



Notes:



SIGN:

Danger Turbulent Water Area Remotely **Operated Water Gates**

COMMENT:

Clear sign using trigger word. Example of safety plan sign design/placement sheet. Sheets list the feature #, # of signs, year installed, location, and design details. Notes indicate sign and font sizing.

RECOMMENDATION:

None.

WL-19

Location: Feature No. is located on the left abutment upstream from the

intake area adjacent to a log boom.

Feature Description:

is a warning sign, twenty-four (24) inches wide by eighteen inches (18) inches high and made of aluminum. The sign is mounted on a four (4) foot high galvanized steel pole. The signage is composed of red and black lettering over a white background.



Notes:



WL-20

SIGN:

Danger Unstable Structure Deep Water Strong Under Currents Keep Off

COMMENT:

Specialized signage for shoreline areas. Example of safety plan sign design/placement sheet. Sheets list the feature #, # of signs, year installed, location, and design details. Notes indicate sign and font sizing.

RECOMMENDATION:

None.

210 Water Levels

11/3"

11/2"

11/2"



Danger Water Level Can Rise Rapidly with or Without Warning

COMMENT:

Specialized "story board" type symbols make dangers more obvious for all viewers if the meaning is clear. Special graphics should be tested for viewer understanding prior to sign creation.

RECOMMENDATION:

None.

WL-21



SIGN:

Sirens and Lights Mean Exit Area Now Water Will Rise Rapidly

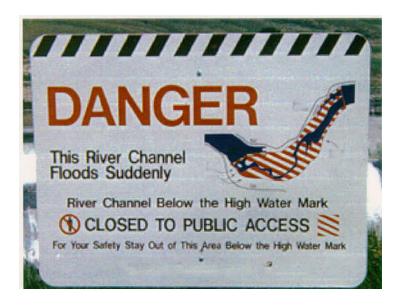
COMMENT:

Specialized "story board" type symbols make dangers more obvious for all viewers if the meaning is clear. Special graphics should be tested for viewer understanding prior to sign creation.

RECOMMENDATION:

None.

WL-22



WL-23

SIGN:

Danger This River Channel Floods Suddenly River Channel Below the High Water Mark Closed to Public Access For Your Safety Stay Out of This Area Below the High Water Mark

COMMENT:

Combination of warning and identification of danger areas can increase effectiveness. Placement at access areas increases effectiveness.

RECOMMENDATION:

None.



SIGN:

Warning Tall Falls Reservoir Water Level Rises and Falls 4 Feet Daily

COMMENT:

Good use of symbols and identification of range of hazard. Allows user to act appropriately.

RECOMMENDATION:

None.

WL-24



Warning Dam Upstream River Level Rises and Falls Daily

COMMENT:

Good use of symbols and identification of hazard. Allows user to act appropriately even though dam is out of view.

RECOMMENDATION:

None.

WL-25



SIGN:

Dangerous Whirlpools Hidden Undercurrents Please Use Extreme Caution While In this Area

COMMENT:

Specialized graphic shows viewer potential hazard while text lists specific safety measures to take.

RECOMMENDATION:

None.

WL-26



Danger This Area May Be Flooded At Any Time

COMMENT:

Good use of short direct safety message to convey possible danger. Good use of trigger words.

RECOMMENDATION:

None.

WL-27



SIGN:

Danger Fast-Rising Waters

COMMENT:

Good use of standard black and red header and trigger word to indicate level of risk. Sign text is easy to read and identifies the potential hazard.

RECOMMENDATION:

None.

WL-28



Caution Lake Water Level Varies Watch for Obstructions

COMMENT:

Placement at access points and known problem areas can increase effectiveness particularly in areas that have many non-local visitors.

RECOMMENDATION:

None.

WL-29

WL-30

Danger

When Horn Sounds Beware of Rapid Rise in Water Level

SIGN:

Danger When Horn Sounds Beware of Rapid Rise in Water Level

COMMENT:

Identifies level of risk, potential indicator of impending change in conditions, and directs user to heighten awareness. Information allows viewer to act on the indicator even after they are out of sight of the sign. Placement at access points increases effectiveness.

RECOMMENDATION:

None.

Danger

When Siren Sounds Beware of Rapid Rise in Water Level SIGN:

Danger When Siren Sounds Beware of Rapid Rise in Water Level

COMMENT:

Identifies level of risk, potential indicator of impending change in conditions, and directs user to heighten awareness. Information allows viewer to act on the indicator even after they are out of sight of the sign. Placement at access points increases effectiveness.

RECOMMENDATION:

None.

WL-31

Danger

Water Subject to Sudden Rise and Turbulence

When Horn Sounds
Proceed Immediately
to Shore

SIGN:

Danger Water Subject to Sudden Rise and Turbulence When Horn Sound Proceed Immediately to Shore

COMMENT:

Identifies level of risk, potential indicator of impending change in conditions, and directs user on how to avoid the hazard. Information allows viewer to act on the indicator even after they are out of sight of the sign. Placement at access points increases effectiveness.

RECOMMENDATION:

None.

WL-32

Restricted Area

Water Levels Change Rapidly Walkway Subject to

Walkway Subject to Sudden Flooding

SIGN:

Restricted Area Water Levels Change Rapidly Walkway Subject to Sudden Flooding

COMMENT:

Identifies non-obvious hazard to both visitors and personnel. Person may assume walkway as safe even under flooding conditions without the warning.

RECOMMENDATION:

None.

WL-33

Warning

Water Subject to Sudden Rise and Turbulence

No Swimming or Wading

SIGN:

Warning Water Subject to Sudden Rise and Turbulence No Swimming or Wading

COMMENT:

Identifies level of risk, identifies the source of the risk, and informs the viewer of prohibited activities. Added information increases effectiveness.

RECOMMENDATION:

None.

WL-34